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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P. O. Box 272400  
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EXAMINER

LEE, CHEUKFAN

ART UNIT	PAPER NUMBER
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2622

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/746,333

Applicant(s)

CLIFTON, LORI

Examiner

Cheukfan Lee

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on Dec. 21, 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____  |

1. Claims 1-20 are pending. Claims 1, 10 and 19 are independent.

2. Claims 9 and 20 are objected to for the following reasons:

In claims 9 and 20, "the first mentioned, second, and third color calibration targets" lacks antecedent basis.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 5-7, 10-12, and 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Motamed (U.S. Patent No. 6,327,047).

Regarding claims 1 and 2, Motamed discloses a scanner and a method for calibrating the scanner. The scanner is inherently housed in a housing as claimed, according to the description of Motamed of the scanner (col. 3, line 65 – col. 4, line 8). The housing inherently includes a first side (top side) supporting the scanning window (scanner glass) and a second side (bottom side) opposite the first side, since the scanner has a cover (to which a calibration target strip may be attached and scanned by the scanning array in another embodiment), and a calibration target strip to be used to

calibrate the scanner is attached by the user to an inside surface of the scanner glass (scanning window). It is also inherent that the scanner has a scanning array and a light source both generally facing the first side (top side) of the housing and both movable in the housing relative to the scanning window (scanner glass) along a scanning path (the subscanning direction) (Figs. 2a and 5, col. 3, line 65 – col. 4, line 21, col. 6, line 46).

Regarding claims 3 and 5, the scanning array of Motamed is a color capable scanning array because among many calibration target strips to select from, the calibration target strip to be used, the ANSI-standard IT8 target (col. 5, lines 49-51), is a color strip which comprises color patches (col. 1, lines 42-43) and the scanner is part of a color image reproduction system being explained (col. 1, lines 10-52).

Regarding claim 6, among the calibration targets to select from, the Kodak® Gray Scale comprises patches of varying densities of gray, which inherently includes black, meets the claimed black target (col. 1, lines 35-42).

Regarding claim 7, as discussed for claims 3 and 5, the IT8 calibration target comprises color patches, which inherently include three or more color patches. (Fig. 2a shows more than three color patches or calibration targets.) The calibration target strip is attached or adhered to the inside surface of the scanning glass as discussed above. The color patches are inherently used for color registration (col. 1, lines 10-52).

Claims 10-12 and 14-16 are rejected as being method claims corresponding to rejected apparatus claims 1-3 and 5-7, respectively.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8, 9, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motamed (U.S. Patent No. 6,324,047), as applied to claim 1 above, in view of Selby (U.S. Patent No. 5,404,232).

Regarding claims 8 and 9, Motamed differs from the claimed invention in that Motamed does not specifically disclose starting the calibration target strip scanning process in response to the scanner being turned on.

However, in addition to the features discussed for claim 1 above, Motamed further discloses an interactive means by which the user can interact with the scanner controller engine. The user decides whether the scanner is to be calibrated or not (step 303 of Fig. 5, col. 6, lines 30-33). If the user desires, the user can calibrate the scanner for every single scan. The user can decide not to calibrate during a scan if it is ore important to the user to perform the scan quickly rather than take the time to calibrate the scanner (col. 6, lines 23-46). Thus, **the control system of the scanner is flexible on the frequency of and time for scanner calibration.** Furthermore, a scanner

power-on switch is inherent in Motamed, and logic circuitry is inherent for effecting movement of the scanning array relative to the scanning glass.

The idea of performing a scanner calibration process at the daily power-up of the scanner to ensure good performance of the scanner is not novel as is taught by Selby (col. 1, lines 31-50).

Since the control system of the scanner of Motamed is flexible on the frequency of and the time for scanner calibration as discussed above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the control system of the scanner of Motamed to perform the calibration process in response to the power-up signal of the scanner in order to ensure good performance of the scanner as taught by Selby.

With respect to the claimed motor configured to move the scanning array, the coupling of the scanner power switch to the scanning array and the motor, the coupling of logic circuitry to the power switch, scanning array and motor, Motamed's invention is applied to scanners, including color scanners, of the type that has a cover and a scanner glass for placing a document thereon, as discussed for claim 1 above. This type of scanner generally employs a linear scanning module driven by a motor such as a stepping motor in the subscanning direction of the scanner, which is discussed by Motamed in the discussion of prior art, the Description of the Prior Art (cols. 1 and 2). In that discussion (col. 2, line 15), the prior art scanner specifically includes a scanning module of the type having a light source and a linear sensor array and is generally driven by a motor in the subscanning direction of the scanner (Figs. 4, 5A and 5B of that

prior art). Logic circuitry is inherent in the prior art scanner for controlling the motor and movement of the scanning module. Thus, the structure of the scanner claimed is not novel.

Based on the reasons of obviousness given above for claim 8 for starting the calibration process upon scanner power-up, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the idea of Selby of starting the calibration process upon scanner power-up, and to couple the inherent scanner power switch to the motor and scanning module, and couple the logic circuitry to the power switch, the scanning module and the motor in such a way that the scanning module is moved in the subscanning direction to scan the calibration target strip in response to the scanner power being turned on, in order to avoid time loss due to calibration at time other than the power-up time at which a user desires to use the scanner.

Regarding claim 9, insofar as the claim is understood to mean that the calibration target includes first, second and third targets, the claim limitations are met by Motamed. The IT8 calibration target being used comprises color patches, which inherently include three or more color patches. The color patches read on the claimed first, second and third targets (col. 1, lines 10-52). (Fig. 2a of Motamed shows more than three targets.) The calibration target strip is attached or adhered to the inside surface of the scanning glass as discussed above.

Claims 17 and 18 are rejected as being method claims corresponding to rejected apparatus claims 8 and 9, respectively.

7. Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motamed (U.S. Patent No. 6,324,047), as applied to claims 1 and 3 above, in view of Fukushi (U.S. Patent No. 6,226,105).

Regarding claim 4, Motamed discussed for claims 1 and 3 further discloses a printer (col. 7, lines 10-42), but the printer is not housed in the same house as the scanner as claimed.

Fukushi discloses that a flat bed scanner and a printer are advantageously placed in the same housing (col. 2, lines 37-40, col. 3, lines 49-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the scanner and printer of Motamed housed in the same housing as taught by Fukushi to take advantage of the fact that a single housing or unit has a better appearance than more than one housing or unit.

With regard to the claimed monochrome printer, Fukushi does not specifically disclose that the printer in the single housing is a monochrome printer. However, nowhere in Fukushi specifically disclose that the printer cannot be a monochrome printer. A thermal transfer type or thermal sublimative type of full-color printer can be "preferably" used (col. 9, lines 1-5). One of ordinary skill in the art would have realized that the single housing of Fukushi is capable of housing a monochrome printer and the scanner instead of the color printer and scanner. Therefore, It would have been



obvious to one of ordinary skill in the art at the time the invention was made to employ a monochrome printer in place of a color printer in the housing in order to print black and white images and reduce cost as compare to employing a color printer.

Claim 13 is rejected as being a method claim corresponding to the rejected apparatus claim 4.

8. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motamed (U.S. Patent No. 6,324,047) in view of Selby (U.S. Patent No. 5,404,232) and Fukushi (U.S. Patent No. 6,226,105).

Regarding claim 19, Motamed discloses a scanner and a method for calibrating the scanner. The scanner is inherently housed in a housing, which reads on the claimed sub-housing, according to the description of Motamed of the scanner (col. 3, line 65 – col. 4, line 8). The sub-housing for the scanner inherently includes a first side (top side) supporting the scanning window (scanner glass) and a second side (bottom side) opposite the first side, since the scanner has a cover (to which a calibration target strip may be attached and scanned by the scanning array in another embodiment), and a calibration target strip to be used to calibrate the scanner is attached by the user to an inside surface of the scanner glass (scanning window) to face the second side of the sub-housing of the scanner. It is also inherent that the scanner has a scanning array and a light source both generally facing the first side (top side) of the housing and both movable in the housing relative to the scanning window (scanner glass) along a

scanning path (the subscanning direction) (Figs. 2a and 5, col. 3, line 65 – col. 4, line 21, col. 6, line 46, and col. 2, lines 13-32). A printer is further shown to be in a separate housing (Fig. 6B). These explanations of the scanner fit the description of a flatbed scanner.

The scanner of Motamed is a color scanner because among many calibration target strips to select from, the calibration target strip to be used, the ANSI-standard IT8 target (col. 5, lines 49-51), is a color strip which comprises color patches (col. 1, lines 42-43) and the scanner is part of a color image reproduction system being explained (col. 1, lines 10-52).

Motamed differs from the claimed invention in that a) Motamed does not specifically disclose starting the calibration target strip scanning process in response to the scanner being turned on, and b) Motamed does not disclose a housing for housing the sub-housing of the scanner.

However, in addition to the features discussed for claim 1 above, Motamed further discloses an interactive means by which the user can interact with the scanner controller engine. The user decides whether the scanner is to be calibrated or not (step 303 of Fig. 5, col. 6, lines 30-33). If the user desires, the user can calibrate the scanner for every single scan. The user can decide not to calibrate during a scan if it is ore important to the user to perform the scan quickly rather than take the time to calibrate the scanner (col. 6, lines 23-46). Thus, **the control system of the scanner is flexible on the frequency of and time for scanner calibration.** Furthermore, a scanner

power-on switch is inherent in Motamed, and logic circuitry is inherent for effecting movement of the scanning array relative to the scanning glass.

With respect to the above difference a) between Motamed and the claimed invention, the idea of performing a scanner calibration process at the daily power-up of the scanner to ensure good performance of the scanner is not novel as is taught by Selby (col. 1, lines 31-50).

Since the control system of the scanner of Motamed is flexible on the frequency of and the time for scanner calibration as discussed above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the control system of the scanner of Motamed to perform the calibration process in response to the power-up signal of the scanner in order to ensure good performance of the scanner as taught by Selby.

With respect to the claimed motor configured to move the scanning array, the coupling of the scanner power switch to the scanning array and the motor, the coupling of logic circuitry to the power switch, scanning array and motor, Motamed's invention is applied to scanners, including color scanners, of the type that has a cover and a scanner glass for placing a document thereon, as discussed for claim 1 above. This type of scanner generally employs a linear scanning module driven by a motor such as a stepping motor in the subscanning direction of the scanner, which is discussed by Motamed in the discussion of prior art, the Description of the Prior Art (cols. 1 and 2). In that discussion (col. 2, line 15), the prior art scanner specifically includes a scanning module of the type having a light source and a linear sensor array and is generally

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driven by a motor in the subscanning direction of the scanner (Figs. 4, 5A and 5B of that prior art). Logic circuitry is inherent in the prior art scanner for controlling the motor and movement of the scanning module. Thus, the structure of the scanner claimed is not novel.

Based on the reasons of obviousness given above for starting the calibration process upon scanner power-up, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the idea of Selby of starting the calibration process upon scanner power-up, and to couple the inherent scanner power switch to the motor and scanning module, and couple the logic circuitry to the power switch, the scanning module and the motor in such a way that the scanning module is moved in the subscanning direction to scan the calibration target strip in response to the scanner power being turned on, in order to avoid time loss due to calibration at time other than the power-up time at which a user desires to use the scanner.

With respect to the above difference b) between Motamed and the claimed invention, Fukushi discloses that a flat bed scanner and a printer are advantageously placed in the same housing (col. 2, lines 37-40 and col. 3, lines 49-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the scanner sub-housing and the printer of Motamed in view of Selby placed in the same housing as taught by Fukushi to take advantage of the fact that a single unit or housing has a better appearance than more than one housing or unit.

With regard to the claimed monochrome printer, Fukushi does not specifically disclose that the printer in the single housing is a monochrome printer. However, nowhere in Fukushi specifically disclose that the printer cannot be a monochrome printer. A thermal transfer type or thermal sublimative type of full-color printer can be "preferably" used (col. 9, lines 1-5). One of ordinary skill in the art would have realized that the housing of Fukushi is capable of housing a monochrome printer and the scanner sub-housing instead of the color printer and scanner. Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a monochrome printer in place of a color printer in the housing in order to print black and white images and reduce cost as compare to employing a color printer.

Regarding claim 20, insofar as the claim is understood to have first, second and third calibration targets, the claim limitations are met by Motamed. The IT8 calibration target being used comprises color patches, which inherently include three or more color patches. The color patches read on the claimed first, second and third targets (col. 1, lines 10-52). (Fig. 2a of Motamed shows more then three targets.) The calibration target strip is attached or adhered to the inside surface of the scanning glass as discussed above.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (703) 305-4867. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cheukfan Lee  
March 3, 2004

  
cheukfan lee